

## CLAIMS

What is claimed is:

1. A retractable roof structural system for a vehicle body having quarter panel sections, the system comprising:

a retractable roof operable between raised and stowed positions;

a retraction mechanism operable to move said retractable roof between said raised and stowed positions;

a decklid operable between first and second positions, said decklid allowing movement of said retractable roof between said raised and stowed positions when said decklid is in said second position, and said decklid covering at least a portion of said retractable roof when in said stowed position when said decklid is in said first position; and

a structural member operable to provide structural support to and increase a stiffness of a vehicle body on which said retractable roof is utilized, said structural member being configured to be selectively coupled adjacent the opposing quarter panel sections, and said structural member is uncoupled from the opposing quarter panel sections when said retractable roof is moving between said raised and stowed positions.

2. The system of claim 1, wherein said structural member is attached to said decklid and moves with said decklid between said first and second positions.

3. The system of claim 1, wherein said retractable roof is a hard-top retractable roof.

4. The system of claim 1, wherein said retractable roof is a soft-top retractable roof.

5. The system of claim 1, wherein said structural member is attached to a frame of said decklid.

6. The system of claim 1, further comprising a retaining mechanism attached to said vehicle body between said opposing quarter panel sections, said retaining mechanism being operable to selectively couple said structural member to said vehicle body.

7. An automotive vehicle comprising:
- a retractable roof operable between raised and stowed positions;
- and
- a moveable structural member operable to selectively provide significant structural support and rigidity to a vehicle body on which said retractable roof is utilized, said structural member selectively coupled to said vehicle body between adjacent body panel structures of said vehicle body in a cross-vehicle orientation, and said structural member being uncoupled from said vehicle body when said retractable roof is moving between said raised and stowed positions.

8. The vehicle of claim 7, further comprising a decklid operable between first and second positions, said decklid when in said first position covering at least a portion of said retractable roof when in said stowed position, and said decklid allowing movement of said retractable roof between said raised and stowed positions when said decklid is in said second position

9. The vehicle of claim 8, wherein said structural member is coupled to said vehicle body when said decklid is in said first position and is uncoupled from said vehicle body when said decklid is in said second position.

10. The vehicle of claim 9, wherein said structural member is coupled to said decklid and moves with said decklid between said first and second positions.

11. The vehicle of claim 10, wherein said structural member is attached to a frame of said decklid.

12. The vehicle of claim 7, wherein said retractable roof is a hard-top retractable roof.

13. The vehicle of claim 7, wherein said retractable roof is a soft-top retractable roof.

14. The vehicle of claim 7, further comprising a retaining mechanism attached to said vehicle body between said adjacent body panel structures, said retaining mechanism being operable to selectively couple said structural member to said vehicle body.

15. The vehicle of claim 7, further comprising a retraction mechanism operable to move said retractable roof between said raised and stowed positions.

16. A decklid system for an automotive vehicle, the decklid system comprising:

a storage compartment covering panel configured to cover a portion of an automotive vehicle;

a panel mechanism operable to move said panel between a first position covering said portion of said automotive vehicle and a second position allowing accesses to said covered portion; and

a structural member operable to selectively provide structural support and rigidity to a body of said vehicle, said structural member extending in a cross-vehicle orientation, being engaged with said body of said vehicle, and providing said support when said panel is in said first position, and said structural member being disengaged from said body of said vehicle when said panel is in said second position.

17. The decklid system of claim 16, further comprising a retaining mechanism on said body of said vehicle and wherein said structural member selectively engages with said retaining mechanism to provide said structural support to said body of said vehicle.

18. The decklid system of claim 17, wherein said retaining mechanism includes a latching member operable to latch said structural member to said retaining mechanism.

19. The decklid system of claim 18, wherein said latching member is a power pull down latching member operable to automatically latch said structural member to said retaining mechanism.

20. The decklid system of claim 17, wherein said retaining mechanism has a sloped surface that aligns said structural member with said retaining mechanism.

21. The decklid system of claim 20, wherein said structural member has a sloped surface that is complementary to said sloped surface of said retaining mechanism and said sloped surfaces align said structural member with said retaining mechanism.

22. The decklid system of claim 17, wherein said retaining mechanism has a clamping member that selectively clamps said structural member to said retaining mechanism.

23. The decklid system of claim 17, further comprising a pin member operable to align said structural member with said retaining mechanism.

24. The decklid system of claim 16, wherein said panel mechanism includes a frame that supports said panel and said structural member is attached to said frame.

25. The decklid system of claim 16, wherein said structural member is attached to said panel.

26. The decklid system of claim 16, wherein said panel is a two way opening panel, said panel mechanism is operable to move said panel to a third position to allow access to said covered portion of said vehicle, and access to said covered portion of said vehicle when said panel is in said second and third positions being from different directions.

27. The decklid system of claim 16, wherein said structural member extends in a cross-vehicle orientation between opposing body panel structures of said body of said vehicle when providing said support.



28. A method of manufacturing a universal stowage area in an automotive vehicle for stowing a convertible roof and providing substantially an equivalent torsional rigidity to the stowage area regardless of the convertible roof being a soft-top or hard-top convertible roof, the method comprising:

(a) positioning retaining mechanisms in the stowage area of the automotive vehicle;

(b) attaching a moveable structural member operable to engage with said retaining mechanisms to provide significant structural support and torsional rigidity to the storage area; and

(c) selectively securing said structural member to the stowage area of the vehicle with said retaining mechanisms.

29. The method of claim 28, wherein (b) includes installing a second mechanism in the stowage area that is operable to move said structural member between a first position enabling said structural member to engage with said retaining mechanisms and a second position disengaged from said retaining mechanism and allowing clearance for raising and stowing a convertible roof.

30. The method of claim 29, further comprising securing a decklid panel to said second mechanism that moves with said structural member between said first and second positions.

31. The method of claim 28, further comprising installing a hard-top convertible roof system in the vehicle.

32. The method of claim 28, further comprising installing a soft-top convertible roof system in the vehicle.

33. A method of moving a retractable roof between a raised position covering a portion of a passenger compartment of a vehicle and a stowed position in a storage area of the vehicle, the method comprising:

(a) moving a structural member that extends across the storage area from a first position providing significant structural support and rigidity to the storage area to a second non-interfering position that allows movement of the retractable roof between the raised and stowed positions;

(b) moving the retractable roof between the raised and stowed positions; and

(c) moving said structural member from said second position to said first position.

34. The method of claim 33, wherein (a) includes disengaging said structural member from a retaining mechanism in the storage area and (c) includes engaging said structural member with said retaining mechanism.

35. The method of claim 34, wherein (c) includes securing said structural member to said retaining mechanism with a latch.

36. The method of claim 35, wherein (c) includes securing said structural member to said retaining mechanism with a power pull down latch.

37. The method of claim 34, wherein (c) includes securing said structural member to said retaining mechanism with a clamp.

38. The method of claim 34, wherein (c) includes aligning said structural member with said retaining mechanism with a pin.

39. The method of claim 34, wherein (c) includes moving said structural member along a sloped surface of said retaining mechanism to align said structural member with said retaining mechanism.

40. The method of claim 33, wherein (a) includes moving a decklid panel from a first position covering a portion of the storage area to a second non-interfering position that allows movement of the retractable roof between the raised and stowed positions and (c) includes moving said decklid panel from said second position to said first position.

41. The method of claim 40, wherein (a) and (c) include moving said structural member and said decklid panel in unison.